Claims:

1. A method for isolating amplifiable nucleic acids from a solid stool sample, said method comprising the steps of

solublizing said stool sample;

mixing the solubilized stool sample with a chaotropic agent;

heating the chaotropic treated solubilized stool sample at about 90°C to about 100°C to produce a lysed cell solution containing a precipitate;

separating the precipitate from the lysed cell solution and treating the lysed cell solution with a protease;

extracting the protease treated lysed cell solution with an organic solvent to produce an aqueous and organic phase; and

recovering the nucleic acids from the aqueous phase.

2. The method of claim 1 wherein the amplifiable nucleic acid is DNA, the chaotropic agent comprises a detergent, and the method further comprises the step of treating the lysed cell solution with an RNase before contacting the lysed cell solution with the organic solvent.

3. The method of claim 2 wherein the step of separating the precipitate from the lysed cell solution comprises centrifuging the sample at about 400 to about 500g.

4. The method of claim 3 wherein the step of solubilizing the stool sample comprises

dissolving the stool sample in a mixture of alcohol and chloroform;

centrifuging the mixture at about 2000 to about 2200g to separate the mixture into a solid mass and a liquid supernatant;

discarding the supernatent and resuspending the solid mass in an aqueous solvent.

5. The method of claim 4 wherein the step of solubilizing the stool sample further comprises rinsing the solid mass with acetone prior to resuspending the

solid mass.

6. The method of claim 5 wherein the aqueous solvent comprises 8M urea and SDS.

7. The method of claim 1 wherein the chaotropic agent comprises a detergent and 8M urea.

8. A method for screening for an *H. pylori* infection in a patient, said method comprising the steps of

obtaining a stool sample from said patient;

solubilizing said stool sample in a solvent comprising an alcohol and chloroform;

centrifuging the solubilized stool sample at about 2000 to about 2200g to separate the mixture into a solid mass and a liquid supernatant;

discarding the supernatant and rinsing the solid mass with acetone;

resuspending the solid mass in a solvent comprising a chaotropic agent to produce a lysed cell solution;

heating the lysed cell solution at about 90°C to about 100°C to produce a heat treated lysed cell solution containing a precipitate;

separating the precipitate from the heat treated lysed cell solution and treating the heat treated lysed cell solution with an enzyme selected from the group consisting of RNases and a proteases to produce an enzyme treated solution;

extracting the enzyme treated solution with an organic solvent to produce an aqueous and organic phase;

recovering the nucleic acid from the aqueous phase;

conducting PCR amplification on said nucleic acid using oligonucleotide primers that are specific for *H. pylori* nucleic acid sequences; and

assaying for amplified *H. pylori* nucleic acid sequences.

9. The method of claim 8 wherein the oligonucleotide probes are complementary to nucleic acid sequences that relate to the virulence of the *H. pylori*

strain.

10. The method of claim 9 wherein the oligonucleotide probes complementary to nucleic acid sequences encoding the *vac* A or *cag* A *H. pylori* genes.

11. A kit for analyzing a stool sample for the presence of H. pylori, said kit comprising

protease K;

an RNase; and

oligonucleotide primers specific for *H. pylori*.

12. The kit of claim 11 further comprising a chaotropic agent.

13. The kit of claim 11 wherein the oligonucleotide primers are complementary to nucleic acid sequences encoding the *vac* A or *cag* A genes.

14. A method for isolating amplifiable bacterial DNA from a solid stool sample, said method comprising the steps of

solubilizing said stool sample in a solvent comprising an alcohol and chloroform;

centrifuging the solubilized stool sample at about 2000 to about 2200g to separate the mixture into a solid mass and a liquid supernatant;

discarding the supernatent and rinsing the solid mass with acetone;

resuspending the solid mass in a solvent comprising a chaotropic agent to produce a lysed cell solution;

heating the lysed cell solution at about 90°C to about 100°C to produce a heat treated lysed cell solution containing a precipitate;

separating the precipitate from the heat treated lysed cell solution and treating the heat treated lysed cell solution with an enzyme selected from the group consisting of RNases and a proteases to produce an enzyme treated solution;

extracting the enzyme treated solution with an organic solvent to produce an aqueous and organic phase; and

recovering the DNA from the aqueous phase.

15. The method of claim 14 wherein the lysed cell solution is treated with an RNase and a protease.

16. The method of claim 14 wherein the step of separating the precipitate from the heat treated lysed cell solution comprises centrifuging the sample at about 400 to about 500g.

17. The method of claim 16 wherein the chaotropic agent comprises a detergent and 8M urea.